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*Via UPS*

July 30, 2018

Air Program Manager  
ND Department of Health  
Division of Air Quality  
918 E. Divide Avenue  
Bismarck, ND 58501-1947

RECEIVED

AUG 2 - 2018

Office of Environment  
Compliance & Environmental Justice

**RE: Semiannual Leak Detection and Repair (LDAR) Monitoring Report  
Targa Badlands Little Missouri Gas Plant, T5-O15001  
McKenzie County, North Dakota**

Dear Mr. Rookey:

Find enclosed the semi-annual monitoring report for Targa Badlands Little Missouri Gas Plant I, II, and III. This report covers the period of January 1, 2018 to June 30, 2018 per NSPS Subpart KKK, Subpart OOOO and Subpart OOOOa regulations.

If you have any questions, or need additional information, please contact me via email at [mitchellanderson@targaresources.com](mailto:mitchellanderson@targaresources.com) or cellular phone (701) 770-0115.

Sincerely,

(b) (6)

Mitchell W. Anderson  
Sr. Environmental Specialist

cc: Cynthia Reynolds – USEPA Region 8 - Denver, CO Via UPS  
David Low, Targa Badlands Area Manager – Watford City, ND  
Shane Tribe, Targa ESH Manager – Denton, TX



July 17, 2018

Mr. Mitch Anderson  
Senior Environmental Specialist  
Targa Resources  
1939 125<sup>th</sup> Avenue NW  
Watford City, ND 58854-9248

RE: Semiannual Leak Detection and Repair (LDAR) Monitoring Report, Little Missouri I Natural Gas Processing Facility (Little Missouri I), McKenzie County, North Dakota

Dear Mr. Anderson:

During January 1, 2018 through June 30, 2018, Trihydro Corporation (Trihydro) completed routine monthly monitoring for fugitive emissions as required by the LDAR program for Little Missouri I natural gas processing facility located in McKenzie County, ND. The monitoring activities were completed to satisfy the requirements of the New Source Performance Standards (NSPS) Subpart KKK, Subpart OOOO, and Subpart OOOOa regulations. This report serves as the documentation required for submittal to the regulatory agencies for the January through June 2018 monitoring period.

#### **NSPS Subpart KKK, OOOO, and OOOOa Requirements**

Subpart KKK, OOOO, and OOOOa requires that a semiannual report be submitted for each process unit and month within the reporting period. The semiannual report must include:

- The number of valves, pressure relief devices (PRDs), pumps, compressors, and connectors (OOOO and OOOOa) for which leaks were detected.
- The number of valves, PRDs, pumps, compressors, and connectors (OOOO and OOOOa) for which leaks were not repaired as required or placed on the delay of repair (DOR) list.
- The facility is required to report the reasons for each DOR and the dates of process unit shutdowns that occurred within the reporting period.
- Revisions to the component inventory.

#### **Results**

The Little Missouri I facility consists of five process units subject to the Subpart KKK regulation, two process units subject to the Subpart OOOO regulation, and two process units subject to the Subpart OOOOa regulation. Trihydro personnel monitored components in volatile organic compound service or

**ATTACHMENT A**

**EQUIPMENT LEAK REPORT,  
DELAY OF REPAIR COMPONENTS, AND  
REVISIONS TO THE PRIOR INVENTORY**

# Semi-Annual Report

From: 1/1/2018 To: 6/30/2018, Rule: NSPS - KKK

Targa Resources

Site: Little Missouri I

Unit: DEETH SK

# Components:	Valves:	64	Pumps:	2	Compressors:	0	PRVs:	0
# Added:		0		0		0		0
# Perm. OOS:		0		0		0		0
Month:	Leaking:	Not Repaired in Repair Period:	Leaking:	Not Repaired in Repair Period:	Leaking:	Not Repaired in Repair Period:	Leaking:	Not Repaired in Repair Period:
January 2018	0	0	0	0	0	0	0	0
February 2018	0	0	0	0	0	0	0	0
March 2018	0	0	0	0	0	0	0	0
April 2018	0	0	0	0	0	0	0	0
May 2018	0	0	0	0	0	0	0	0
June 2018	0	0	0	0	0	0	0	0

Delay of Repairs:

No Delay of Repairs Performed.

Late Repairs:

No Late Repairs.

# Semi-Annual Report

From: 1/1/2018 To: 6/30/2018, Rule: NSPS - KKK

Targa Resources

Site: Little Missouri I

Unit: LOADING

# Components:	Valves:	50	Pumps:	0	Compressors:	0	PRVs:	3
# Added:		0		0		0		0
# Perm. OOS:		0		0		0		0
Month:	Leaking:	Not Repaired in Repair Period:	Leaking:	Not Repaired in Repair Period:	Leaking:	Not Repaired in Repair Period:	Leaking:	Not Repaired in Repair Period:
January 2018	0	0	0	0	0	0	0	0
February 2018	0	0	0	0	0	0	0	0
March 2018	0	0	0	0	0	0	0	0
April 2018	0	0	0	0	0	0	0	0
May 2018	0	0	0	0	0	0	0	0
June 2018	0	0	0	0	0	0	0	0

Delay of Repairs:

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No Delay of Repairs Performed.

Late Repairs:

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No Late Repairs.

# Semi-Annual Report

From: 1/1/2018 To: 6/30/2018, Rule: NSPS - OOOO

Targa Resources

Site: Little Missouri I

Unit: FLARE

Count:	Valves: 27		Pumps: 3		Compressors: 0		PRVs: 0		Connectors: 35	
# Added:	0		0		0		0		0	
# Removed:	0		0		0		0		0	
Month:	Leaking:	Not Repaired in Repair Period:	Leaking:	Not Repaired in Repair Period:	Leaking:	Not Repaired in Repair Period:	Leaking:	Not Repaired in Repair Period:	Leaking:	Not Repaired in Repair Period:
Jan 2018	0	0	0	0	0	0	0	0	0	0
Feb 2018	0	0	0	0	0	0	0	0	0	0
Mar 2018	0	0	0	0	0	0	0	0	0	0
Apr 2018	0	0	0	0	0	0	0	0	0	0
May 2018	0	0	0	0	0	0	0	0	0	0
Jun 2018	0	0	0	0	0	0	0	0	0	0

Delay of Repairs:

No Delay of Repairs Performed.

Late Repairs:

No Late Repairs.

**ATTACHMENT B**  
**EPA CDX REPORTING TABLE**



July 17, 2018

Mr. Mitch Anderson  
Senior Environmental Specialist  
Targa Resources  
1939 125<sup>th</sup> Ave. NW  
Watford City, ND 58854

RE: Semiannual Leak Detection and Repair (LDAR) Monitoring Report, Little Missouri II Natural Gas Processing Facility, McKenzie County, North Dakota

Dear Mr. Anderson:

During January 1, 2018 through June 30, 2018, Trihydro Corporation (Trihydro) completed routine monthly monitoring for fugitive emissions as required by the LDAR program for Little Missouri II (Little Missouri II) natural gas processing facility located in McKenzie County, ND. The monitoring activities were completed to satisfy the requirements of the New Source Performance Standard (NSPS) Subpart OOOO regulation. This report serves as the documentation required for submittal to the regulatory agencies for the January through June 2018 monitoring period.

#### **NSPS Subpart OOOO Requirements**

NSPS Subpart OOOO requires that a semiannual report be submitted for each process unit and month within the reporting period. The semiannual report must include:

- The number of valves, pressure relief devices (PRDs), pumps, compressors, and connectors for which leaks were detected.
- The number of valves, PRDs, pumps, compressors, and connectors for which leaks were not repaired as required or placed on the delay of repair (DOR) list.
- The facility is required to report the reasons for each DOR and the dates of process unit shutdowns that occurred within the reporting period.
- Revisions to the component inventory.

#### **Subpart OOOO Results**

The Little Missouri II facility consists of seven process units subject to the Subpart OOOO regulation. Trihydro personnel monitored components in volatile organic compound service and in wet gas service, in accordance with United States Environmental Protection Agency Method 21 protocol.

**ATTACHMENT A**

**EQUIPMENT LEAK REPORT,  
DELAY OF REPAIR COMPONENTS, AND  
REVISIONS TO THE PRIOR INVENTORY**

# Semi-Annual Report

From: 1/1/2018 To: 6/30/2018, Rule: NSPS - OOOO

Targa Resources

Site: Little Missouri II

Unit: CRYO

Count:	Valves:	478	Pumps:	0	Compressors:	0	PRVs:	3	Connectors:	1073
# Added:		0		0		0		0		0
# Removed:		0		0		0		0		0
Month:	Leaking:	Not Repaired in Repair Period:	Leaking:	Not Repaired in Repair Period:	Leaking:	Not Repaired in Repair Period:	Leaking:	Not Repaired in Repair Period:	Leaking:	Not Repaired in Repair Period:
Jan 2018	0	0	0	0	0	0	0	0	0	0
Feb 2018	0	0	0	0	0	0	0	0	0	0
Mar 2018	0	0	0	0	0	0	0	0	0	0
Apr 2018	0	0	0	0	0	0	0	0	0	0
May 2018	0	0	0	0	0	0	0	0	0	0
Jun 2018	0	0	0	0	0	0	0	0	0	0

Delay of Repairs:

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No Delay of Repairs Performed.

Late Repairs:

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No Late Repairs.

# Semi-Annual Report

From: 1/1/2018 To: 6/30/2018, Rule: NSPS - OOOO

Targa Resources

Site: Little Missouri II

Unit: GLY SKID

Count:	Valves:	216	Pumps:	4	Compressors:	0	PRVs:	2	Connectors:	507
# Added:		12		0		0		0		42
# Removed:		5		0		0		0		9
Month:	Leaking:	Not Repaired in Repair Period:	Leaking:	Not Repaired in Repair Period:	Leaking:	Not Repaired in Repair Period:	Leaking:	Not Repaired in Repair Period:	Leaking:	Not Repaired in Repair Period:
Jan 2018	0	0	0	0	0	0	0	0	0	0
Feb 2018	0	0	0	0	0	0	0	0	0	0
Mar 2018	0	0	0	0	0	0	0	0	0	0
Apr 2018	0	0	0	0	0	0	0	0	0	0
May 2018	0	0	0	0	0	0	0	0	0	0
Jun 2018	1	0	0	0	0	0	0	0	0	0

Delay of Repairs:

No Delay of Repairs Performed.

Late Repairs:

No Late Repairs.

# Semi-Annual Report

From: 1/1/2018 To: 6/30/2018, Rule: NSPS - OOOO

Targa Resources

Site: Little Missouri II

Unit: METHANOL

Count:	Valves:	13	Pumps:	3	Compressors:	0	PRVs:	0	Connectors:	91
# Added:		0		0		0		0		0
# Removed:		0		0		0		0		0
Month:	Leaking:	Not Repaired in Repair Period:	Leaking:	Not Repaired in Repair Period:	Leaking:	Not Repaired in Repair Period:	Leaking:	Not Repaired in Repair Period:	Leaking:	Not Repaired in Repair Period:
Jan 2018	0	0	0	0	0	0	0	0	0	0
Feb 2018	0	0	0	0	0	0	0	0	1	0
Mar 2018	0	0	0	0	0	0	0	0	0	0
Apr 2018	0	0	0	0	0	0	0	0	0	0
May 2018	0	0	0	0	0	0	0	0	0	0
Jun 2018	0	0	0	0	0	0	0	0	0	0

Delay of Repairs:

No Delay of Repairs Performed.

Late Repairs:

No Late Repairs.



July 17, 2018

Mr. Mitch Anderson  
Senior Environmental Specialist  
Targa Resources  
1939 125<sup>th</sup> Avenue NW  
Watford City, ND 58854

RE: Semiannual Leak Detection and Repair Monitoring Report, Little Missouri III Natural Gas Processing Facility (Little Missouri III), McKenzie County, North Dakota

Dear Mr. Anderson:

During January 1, 2018 through June 30, 2018, Trihydro Corporation (Trihydro) completed routine monthly monitoring for fugitive emissions as required by the Leak Detection and Repair (LDAR) program for Little Missouri III natural gas processing facility, including the Smokey Compressor Station, located in McKenzie County, ND. The monitoring activities were completed to satisfy the requirements of the New Source Performance Standards (NSPS) Subpart OOOO regulation. This report serves as the documentation required for submittal to the regulatory agencies for the January through June 2018 monitoring period.

#### **Regulatory Requirements**

Subpart OOOO require that a semiannual report be submitted for each process unit and month within the reporting period. The semiannual report must include:

- Number of valves, pressure relief devices (PRDs), pumps, compressors, and connectors for which leaks were detected.
- The number of valves, PRDs, pumps, compressors, and connectors for which leaks were not repaired as required or placed on the delay of repair (DOR) list.
- The facility is required to report the reasons for each DOR, the dates of process unit shutdowns that occurred within the reporting period.
- Revisions to the component inventory.

#### **Subpart OOOO Results**

The Little Missouri III facility consists of eight process units subject to the Subpart OOOO regulation. Trihydro personnel monitored components in volatile organic compound service and in wet gas service, in accordance with United States Environmental Protection Agency Method 21 protocol.

**ATTACHMENT A**

**EQUIPMENT LEAK REPORT,  
DELAY OF REPAIR COMPONENTS, AND  
REVISIONS TO THE PRIOR INVENTORY**

# Semi-Annual Report

From: 1/1/2018 To: 6/30/2018, Rule: NSPS - OOOO

Targa Resources

Site: Little Missouri III

Unit: CRYO

Count:	Valves:	488	Pumps:	6	Compressors:	2	PRVs:	8	Connectors:	739
# Added:		0		1		0		0		0
# Removed:		0		0		0		0		0
Month:	Leaking:	Not Repaired in Repair Period:	Leaking:	Not Repaired in Repair Period:	Leaking:	Not Repaired in Repair Period:	Leaking:	Not Repaired in Repair Period:	Leaking:	Not Repaired in Repair Period:
Jan 2018	0	0	0	0	0	0	0	0	0	0
Feb 2018	1	0	0	0	0	0	0	0	0	0
Mar 2018	0	0	0	0	0	0	0	0	0	0
Apr 2018	0	0	0	0	0	0	0	0	0	0
May 2018	2	1	0	0	0	0	0	0	0	0
Jun 2018	0	0	0	0	0	0	0	0	0	0

## Delay of Repairs:

Area:	Tag:	Leak Date:	Repair Date:	Type:	Reason:
CRYO	133483-000	5/1/2018	Not Repaired	VLV	REPAIR INFEASIBLE W/O SHUTDOWN

## Late Repairs:

No Late Repairs.

# Semi-Annual Report

From: 1/1/2018 To: 6/30/2018, Rule: NSPS - OOOO

Targa Resources

Site: Little Missouri III

Unit: INLET

Count:	Valves:	68	Pumps:	0	Compressors:	0	PRVs:	2	Connectors:	72
# Added:		0		0		0		0		0
# Removed:		0		0		0		0		0
Month:	Leaking:	Not Repaired in Repair Period:	Leaking:	Not Repaired in Repair Period:	Leaking:	Not Repaired in Repair Period:	Leaking:	Not Repaired in Repair Period:	Leaking:	Not Repaired in Repair Period:
Jan 2018	0	0	0	0	0	0	0	0	0	0
Feb 2018	0	0	0	0	0	0	0	0	0	0
Mar 2018	0	0	0	0	0	0	0	0	0	0
Apr 2018	0	0	0	0	0	0	0	0	0	0
May 2018	0	0	0	0	0	0	0	0	0	0
Jun 2018	0	0	0	0	0	0	0	0	0	0

Delay of Repairs:

No Delay of Repairs Performed.

Late Repairs:

No Late Repairs.

# Semi-Annual Report

From: 1/1/2018 To: 6/30/2018, Rule: NSPS - OOOO

Targa Resources

Site: Little Missouri III

Unit: PROPANE

Count:	Valves:	85	Pumps:	0	Compressors:	1	PRVs:	0	Connectors:	102
# Added:		0		0		0		0		0
# Removed:		0		0		0		0		0
Month:	Leaking:	Not Repaired in Repair Period:	Leaking:	Not Repaired in Repair Period:	Leaking:	Not Repaired in Repair Period:	Leaking:	Not Repaired in Repair Period:	Leaking:	Not Repaired in Repair Period:
Jan 2018	0	0	0	0	0	0	0	0	0	0
Feb 2018	0	0	0	0	0	0	0	0	0	0
Mar 2018	0	0	0	0	0	0	0	0	0	0
Apr 2018	0	0	0	0	0	0	0	0	0	0
May 2018	0	0	0	0	0	0	0	0	0	0
Jun 2018	2	0	0	0	0	0	0	0	0	0

Delay of Repairs:

No Delay of Repairs Performed.

Late Repairs:

No Late Repairs.

# Semi-Annual Report

From: 1/1/2018 To: 6/30/2018, Rule: NSPS - OOOO

Targa Resources

Site: Little Missouri III

Unit: TANK FARM

Count:	Valves:	66	Pumps:	0	Compressors:	0	PRVs:	0	Connectors:	209
# Added:		0		0		0		0		0
# Removed:		0		0		0		0		0
Month:	Leaking:	Not Repaired in Repair Period:	Leaking:	Not Repaired in Repair Period:	Leaking:	Not Repaired in Repair Period:	Leaking:	Not Repaired in Repair Period:	Leaking:	Not Repaired in Repair Period:
Jan 2018	0	0	0	0	0	0	0	0	0	0
Feb 2018	0	0	0	0	0	0	0	0	0	0
Mar 2018	0	0	0	0	0	0	0	0	0	0
Apr 2018	0	0	0	0	0	0	0	0	0	0
May 2018	0	0	0	0	0	0	0	0	0	0
Jun 2018	0	0	0	0	0	0	0	0	0	0

Delay of Repairs:

No Delay of Repairs Performed.

Late Repairs:

No Late Repairs.



July 17, 2018

Mr. Mitch Anderson  
Senior Environmental Specialist  
Targa Resources  
1939 125<sup>th</sup> Avenue NW  
Watford City, ND 58854

RE: Semiannual Leak Detection and Repair Monitoring Report, Little Missouri III Natural Gas Processing Facility (Little Missouri III), McKenzie County, North Dakota

Dear Mr. Anderson:

During January 1, 2018 through June 30, 2018, Trihydro Corporation (Trihydro) completed routine monthly monitoring for fugitive emissions as required by the Leak Detection and Repair (LDAR) program for Little Missouri III natural gas processing facility, including the Smokey Compressor Station, located in McKenzie County, ND. The monitoring activities were completed to satisfy the requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP) Maximum Achievable Control Technology (MACT) Subpart HH regulation. This report serves as the documentation required for submittal to the regulatory agencies for the January through June 2018 monitoring period.

#### **Regulatory Requirements**

Subpart HH requires that a semiannual report be submitted for each process unit and month within the reporting period. The semiannual report must include:

- Number of valves, pressure relief devices (PRDs), pumps, and compressors for which leaks were detected.
- The number of valves, PRDs, pumps, and compressors for which leaks were not repaired as required or placed on the delay of repair (DOR) list.
- The facility is required to report the reasons for each DOR, the dates of process unit shutdowns that occurred within the reporting period.
- Revisions to the component inventory.

#### **Subpart HH Results**

Trihydro personnel monitored components in volatile hazardous air pollutant (VHAP) service with concentrations greater than 10 percent by weight, in accordance with United States Environmental Protection Agency Method 21 protocol.

**ATTACHMENT A**

**EQUIPMENT LEAK REPORT,  
DELAY OF REPAIR COMPONENTS, AND  
REVISIONS TO THE PRIOR INVENTORY**